

Claims

1. A refrigerating cycle device comprising a compressor, a refrigerant-water heat exchanger, a first decompressor, a first heat exchanger, a second decompressor, a second heat exchanger, an internal heat exchanger and a hot water cycle, wherein

said hot water cycle includes a heater core which sucks hot water at the downstream side of the refrigerant-water heat exchanger,

said compressor compresses a refrigerant which is carbon dioxide,

said refrigerant-water heat exchanger performs heat exchange between said compressed refrigerant and the hot water in said hot water cycle,

said first decompressor decompresses or does not decompress said compressed refrigerant,

said first heat exchanger performs heat exchange of said refrigerant which is decompressed by said first decompressor,

said internal heat exchanger performs heat exchange between said refrigerant which is subjected to heat exchange by said first heat exchanger and said refrigerant sucked by said compressor,

said second decompressor decompresses said refrigerant which is subjected to heat exchange by said

internal heat exchanger,

said second heat exchanger performs heat exchange of said refrigerant which is decompressed by the second decompressor, and

a refrigerant pressure of said first heat exchanger is changed by operating said first decompressor and/or said second decompressor so as to adjust a refrigerant holding quantity of said first heat exchanger whereby an imbalance of a refrigerant quantity between time for space cooling and time for space heating/dehumidifying is alleviated.

2. A refrigerating cycle device according to claim 1, wherein said refrigerating cycle device comprises compressor discharge temperature detection means which detects a discharge temperature of said compressor, compressor suction temperature detection means which detects a suction temperature of said compressor or compressor discharge pressure detection means which detects a discharge pressure of said compressor, and

the adjustment of the refrigerant holding quantity of said first heat exchanger by changing refrigerant pressure of said first heat exchanger means to control said second decompressor using a value detected by said compressor discharge temperature detection means, said compressor suction temperature detection means or said

compressor discharge pressure detection means.

3. A refrigerating cycle device according to claim 1, wherein said refrigerating cycle device comprises a first bypass circuit which connects the discharge side of said compressor and the inlet of said first heat exchanger by way of a first open/close valve.

4. A refrigerating cycle device according to claim 3, wherein said refrigerating cycle device comprises a first heat exchanger temperature detection means which detects a refrigerant temperature of said first heat exchanger, and

said first decompressor or said first open/close valve is controlled using a value which is detected by said first heat exchanger temperature detection means.

5. A refrigerating cycle device according to claim 1, wherein said refrigerating cycle device comprises a second bypass circuit which connects the inlet and the outlet of said second heat exchanger by way of a second open/close valve.

6. A refrigerating cycle device according to claim 1, wherein said refrigerating cycle device comprises a third bypass circuit which connects an inlet and an outlet of the first heat exchanger by way of a third open/close valve.

7. A refrigerating cycle device according to claim

1, wherein said refrigerating cycle device comprises a fourth open/close valve at an inlet of said first heat exchanger.

8. A refrigerating cycle device according to claim 1, wherein said refrigerating cycle device comprises:

a fifth open/close valve which is disposed between an outlet of said refrigerant-water heat exchanger and said first decompressor;

a first three-way valve which is disposed between an outlet of said first heat exchanger and an inlet of said internal heat exchanger;

a fourth bypass circuit which is connected by having one end thereof disposed between an outlet of said refrigerant-water heat exchanger and an inlet of said fifth open/close valve and the other end formed of said first three-way valve;

a second three-way valve which is disposed between an outlet of said internal heat exchanger and an inlet of said second decompressor;

a fifth bypass circuit which is connected by having one end thereof formed of said second three-way valve and the other end thereof disposed between an outlet of said fifth open/close valve and an inlet of said first decompressor;

a sixth bypass circuit which is connected by having

one end thereof disposed between an outlet of said first heat exchanger and said first three-way valve and the other end thereof disposed between said second three-way valve and said second decompressor and by way of a sixth open/close valve; and

refrigerant circulation mode changeover means which selectively changes over a steady mode in which the refrigerant which is flown out from said refrigerant-water heat exchanger is circulated by way of said fifth open/close valve and a start mode in which the refrigerant is circulated in said fourth bypass circuit and said fifth bypass circuit.